CLAIMS

1. A method for producing human cell-lines comprising:

a) immortalising a human undifferentiated or precursor cell of a given tissue type using an immortalising agent which includes or has associated therewith a control means whereby activation of the control means terminates immortalisation and allows differentiation of the undifferentiated or precursor cell,

b) culturing said immortalised cell in order to produce a homogeneous population of human cells,

c) activating the control means in order to terminate immortalisation and activate differentiation; and

d) allowing differentiation of said cells so as to produce fully differentiated cells of said given tissue type.

2. A method according to Claim 1 wherein said immortalising agent is an immortalising gene.

3. A method according to Claim 2 wherein said gene is a viral oncogene.

4. A method according to Claims 1, 2 or 3 wherein said immortalising agent is a construct.

5. A method according to Claim 4 wherein said construct is a retroviral construct.

6. A method according to Claims 1 to 5 wherein said control means is responsive to environmental conditions.

7. A method according to any preceding Claim wherein said immortalising agent and control means are integrated.

8. A method according to Claim 7 wherein said integrated immortalisation agent and control means comprise a temperature sensitive entity.

9. A method according to Claim 8 wherein said entity is an oncogene.

10. A method according to Claims 8 or 9 wherein the immortalising agent is SV40T antigen.

11. A method according to Claim 1 wherein said immortalising agent is a chemical means.

12. A method according to Claim 1 wherein said immortalising agent is a physical means.

13. A method according to any preceding claim wherein the process of allowing differentiation of said cells involved exposure of said cells to a differentiating agent.

14. A method according to Claim 13 wherein said agent is Vitamin D_3.

15. A method according to Claims 13 or 14 wherein said agent is Vitamin K, either alone or in combination with Vitamin D_3.

16. A method according to Claim 13 wherein said agent, is dexamethasone.

17. A method according to Claim 13 wherein said agent is, rabbit serum or an extract thereof.

18. A method according to any preceding claim which method further involves immortalisation of a human undifferentiated or precursor cell with an immortalising agent and also a safety means which enables selective disabling and/or destruction of said cell-line.

19. A method according to Claim 18 wherein said method involves transfection of said cell-line with a gene which in the presence of certain agents produces a cytotoxic effect and/or product.

20. A method according to Claim 19 wherein said gene is viral thymidine kinase.

21. A method according to Claim 19 wherein said gene is cytosine deaminse.

22. A method according to Claim 18 wherein transcription of the immortalising agent also results in transcription of the safety means.

23. Cells or cell-lines produced in accordance with the method of the invention.

24. Cells or cell-lines according to Claim 23 comprising at least one homogeneous population of immortalised cells provided with means to terminate immortalisation such that a homogeneous population of differentiated cells is provided.

25. Cells or cell-lines according to Claims 23 or 24 comprising at least one safety means in accordance with the invention.

26. Cells or cell-lines according to Claims 22 to 25 wherein said cells or cell-lines are of human origin.

27. Use of immature, undifferentiated or precursor cells to produce terminally differentiated human cell-lines that express tissue-specific functions.